



**United States Environmental Protection Agency, Region VIII  
1595 Wynkoop Street, Denver, CO 80202**

# **Red & Bonita Mine Site Removal Action**

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## **Community Involvement Plan**

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## Table of Contents

I.	Introduction .....	1
II.	Site Description .....	1
A.	Site Overview .....	1
B.	Site Location.....	1
C.	Site Description .....	2
D.	Site History .....	2
E.	Area Map.....	3
III.	Community Profile and Concerns .....	4
A.	Community Profile .....	4
Community Setting.....		4
Population and Growth.....		4
Education.....		4
Occupations, Employment and Business.....		4
Income .....		5
Environmental Justice .....		5
B.	Community Concerns/Interests .....	5
IV.	Community Involvement Activities .....	7
V.	Attachments.....	8
Attachment A – List of Contacts and Interested Parties.....		9
Attachment B – Locations of Information Repositories and Meeting Locations .....		12
Attachment C – Glossary.....		13

## I. Introduction

The U.S. Environmental Protection Agency is committed to promoting communication between citizens and the Agency. Active public participation is crucial to the success of any public project. This Community Involvement Plan (CIP) is the foundation for community involvement activities for the Red and Bonita Mine (Site) Removal Action.

The purpose of the CIP is to identify the concerns of the people affected by the Site and develop methods to address those concerns. The CIP forms the foundation for developing the appropriate information to be disseminated to the public and for determining what actions are necessary to address the public's concerns. The community involvement activities at the Site are designed to provide two-way communication.

EPA staff have met many stakeholders interested in the Red and Bonita Mine Removal Action. These informal interviews and conversations serve as the foundation of the Community Involvement Plan.

## II. Site Description

### A. Site Overview

Cleanup is taking place at this Site through a time-critical removal action. The removal start date was October 1, 2014. The removal action involves installing an engineered reinforced bulkhead to stop the flow of contaminated water coming out of the mine adit.

The Animas River and many of its tributaries, including Cement Creek, carry high concentrations of hazardous substances (heavy metals) from both acid rock/mine drainage at mine sites and from natural sources not impacted by mining.

A U.S Geological Survey (USGS) evaluation of water quality data indicates that during low-flow conditions, mine adit discharges to Cement Creek contribute a large percentage of the metals loading to the Animas River, as measured at the A72 sampling location below Silverton. In October 2012, the sampling results and related modeling showed that the Red and Bonita Mine discharge accounted for an estimated 18 percent of the zinc load at A72, a location on the Animas River below Silverton.

### B. Site Location

The Red and Bonita Mine Site is located within the Cement Creek watershed, a component of the Upper Animas River watershed in unincorporated San Juan County, Colorado. The portal is located approximately seven miles north of the Town of Silverton, Colorado, at 10,893 feet

above mean sea level, at 37 degrees 53'49.95"N and 107 degrees 38'38.70"W. Road access is via County Road 110 from Silverton to County Road 53 at the abandoned town of Gladstone.

### C. Site Description

The Red and Bonita Mine Site consists of approximately 1.25 acres of waste rock and suspected tailings material and includes an estimated 3,500 feet of underground workings. The adit, which currently drains approximately 300 gallons per minute (gpm) throughout the year with some fluctuations seasonally, discharges to Cement Creek after crossing through a wetland. Prior to the removal assessment work, the mine water discharged through rock debris, which was the result of a tunnel collapse that occurred decades ago. The Red and Bonita is one of several mines in the Cement Creek basin that also have draining adits. The relative contribution from all the individual mines in the watershed varies seasonally, depending on flow conditions.

The Site lies east of Cement Creek on a west-facing mountainside slope with an average grade of 44 percent. The mine is accessible during non-snow months of the year, typically late June through early October. The mining claims associated with the mine are on steep terrain, at approximately 10,800 feet of elevation, limiting conditions for operation.

### D. Site History

The watersheds within the volcanic terrain of the San Juan Mountains were the focus of both large- and small-scale mining operations that were active between 1871 and 1991. Historic mapping of the Red and Bonita Mine indicates that mining operations began prior to 1899 and lasted for only a short period of time. No activity occurred after initial operations ceased.

The Red and Bonita Mine, Gold King (Level 7) Mine and Mogul Mine all experienced significant increases in flow following the construction of concrete bulkheads in the Sunnyside Mine – American Tunnel between 1996 and 2002. Flow from the American Tunnel was reportedly approximately 1,700 gpm when it was treated prior to the final bulkhead installation. The Red and Bonita Mine was essentially dry with an estimated five gpm flow during the period when the Sunnyside Gold Mine operated and prior to installation of the bulkheads. It now has an approximate flow of 300 gpm. Following the installation of the bulkheads, water treatment of the discharge from the American Tunnel and Cement Creek was discontinued. Water quality in the Animas River has degraded since that time.

## E. Area Map



### III. Community Profile and Concerns

#### A. Community Profile

##### Community Setting

San Juan County is located in southwest Colorado in the San Juan Mountains. At 11,240 feet, it has the highest mean elevation of any county in the United States. San Juan County encompasses 387 square miles, of which approximately 87% is federal land. The County seat, and the only incorporated municipality in the County, is Silverton.

The headwaters of the Animas River are located in San Juan County. After flowing through the Town of Silverton, the river continues through La Plata County and the City of Durango, Colorado, to its confluence with the San Juan River at Farmington, New Mexico.

##### Population and Growth

With a population of 699 people, San Juan County is the least populated county in Colorado. The population dropped an estimated one percent from April 1, 2010 to April 1, 2013 according to the U.S. Census Bureau. The median age in San Juan County recorded in 2010 Census was 43.8 years. Persons under five years of age comprised 5.2 percent of the populations, while those over 65 years of age comprised 12.3 percent. The majority of County residents live in Silverton, which has a population of approximately 637 people.

##### Education

According to the U.S. Census Bureau 2008-2012 American Community Survey, an approximately 91.4 percent of San Juan County residents have received a high school diploma or higher. An estimated 30.2 percent of residents have a bachelor's degree or higher.

Silverton currently has one school building, which houses elementary, middle and high school grades (K-12) with approximately 60 students. Silverton Public Schools' curriculum is the Expeditionary Learning Outward Bound model. A successful \$12 million renovation, including state-of-the-art learning facilities and advanced technology, was completed in 2012. Other education providers in the community are the Silverton Family Learning Center (6-weeks to 6-year olds) and Mountain Studies Institute, an independent not-for-profit mountain research and education center.

##### Occupations, Employment and Business

Silverton was incorporated in 1874. It was primarily a mining community until 1991, when mining operations ceased in the area. The economy of the community is now reliant upon seasonal tourism.

Visitors hike, bike and drive ATVs on the County's back roads. In the summer months, the Durango and Silverton Narrow Gauge Railroad brings 170,000 tourists to Silverton. In the winter skiers and snowboarders visit Silverton Mountain ski area and the surrounding backcountry.

According to 2012 U.S. Census Bureau data, there were 68 businesses operating in San Juan County with 222 paid employees. Of those, the two highest sectors were retail trade, with 16 establishments and 26 paid employees, and accommodations and food services with 23 establishments and 83 paid employees.

### Income

According to the U.S. Census Bureau, the median household income (2008-2012) in San Juan County was \$37,330. At 19.5 percent, the percentage of people living below poverty level (2008-2012) exceeded the state average of 12.9 percent.

### Environmental Justice

In consultation with the EPA Region 8 Environmental Justice program, and based on existing EPA environmental data and U.S. Census demographic data, environmental justice was not identified as a concern for the Town of Silverton or San Juan County.

## **B. Community Concerns/Interests**

EPA has conducted a number of informal interviews with citizens of Silverton and San Juan County representing a cross section of elected officials, business people, property owners at a adjacent to the Site, community leaders and residents. Conversations were also held with other interested parties, including the La Plata Board of County Commissioners. In addition, EPA presented information about the planned removal activities to the San Juan Board of County Commissioners, and with CDPHE and BLM, hosted an open house availability session in Silverton to allow citizens the opportunity to gather information about the project and voice any concerns or interests they might have.

Concerns voiced by citizens during these informal conversations have been summarized into four main areas:

1. Familiarity with the Red and Bonita Mine adit and associated drainage;
2. Awareness of what work EPA will be doing at the Site;
3. Issues and concerns express by the community about this Site; and
4. How to provide for effective communication with the public.

### 1. Familiarity with the Red and Bonita Mine adit and associated drainage

In general, most individuals were familiar with the Red and Bonita Mine adit and the associated drainage. Most people were aware that drainage from the adit had increased after bulkheads were placed in the American Tunnel. Although many people were aware that drainage from the adit released a significant load of heavy metals to Cement Creek and the Animas River, some were not aware of the constituent metals being released or the relative contribution of metal loading from Red and Bonita Mine to the Animas River.

### 2. Awareness of what work EPA will be doing at the Site

Most individuals were aware, in general terms, of EPA's plans to place a bulkhead in the Red and Bonita Mine. Some were also aware of when the work would be conducted and of the associated work that would be needed in preparation for bulkhead placement in the mine.

Although most individuals expressed support for the removal action at the Red and Bonita Mine, many thought that additional steps would need to be taken to achieve desired water quality improvements. Many people viewed this removal action as part of a larger effort to improve water quality in the Animas River, which may involve remedial activities and a potential designation of the watershed as a National Priority. A significant number of people were supportive of the removal action specifically because it didn't require such a designation.

After a presentation on the EPA's plans for the Red and Bonita Mine adit, the San Juan County Commissioners expressed their support for the removal action.

### 3. Issues and concerns express by the community about this Site

Many individuals expressed the opinion that due to naturally-occurring mineralization in the region, Cement Creek would never support aquatic life, no matter how much work was done to reduce acid mine drainage into the creek. They felt that money shouldn't be spent to reduce drainage from mine adits and waste piles into Cement Creek since it was going to be negatively impacted by naturally-occurring mineralization anyway.

Some individuals are concerned that placing a bulkhead in the mine will increase drainage from other mine adits in the area. One individual wondered if placing a bulkhead in the mine, along with prior actions that have been taken in other mines and tunnels, will divert groundwater from one watershed to another.

A few individuals expressed disappointment that drainage from the mine had not been addressed sooner.



#### 4. How to provide for effective communication with the public

Many individuals said that notices in the local newspaper, the Silverton Standard, were an effective way to communicate with the community. Some also mentioned public meetings as a good way to connect with local residents. Following an Open House Availability Session, several attendees voiced their preference for such informal gatherings rather than more formal public meeting formats.

Internet access to Silverton has been slow and unreliable in the past. However, a new fiber optic cable has just been installed to the community, and electronic communications may be more attractive to area residents in the future.

### IV. Community Involvement Activities

EPA feels the overall goal of the community involvement program is to promote two-way communication between citizens and the Agency. Additionally, it is intended to provide opportunities for meaning and active involvement in the process. It also identifies methods for providing timely and appropriate information that responds to residents' questions and concerns.

<b>1. Information Repository and Administrative Record</b>	
<b>Objective:</b>	To provide residents and interested parties with all documents used by EPA in reaching decisions about the Site and its cleanup.
<b>Method:</b>	Two information repositories will be established at: <ul style="list-style-type: none"><li>• U.S. EPA Region 8, 1595 Wykoop Street, Denver, Colorado</li><li>• Silverton Library, 1111 Reese St, Silverton, Colorado</li></ul>
<b>Timing:</b>	The administrative record must be established within 60 days of initiation of on-Site removal activities.
<b>2. Public Comment Period</b>	
<b>Objective:</b>	To give the community an opportunity to review and comment on the administrative record. This provides for meaningful involvement in the process and provides EPA with valuable information for use in making decisions.
<b>Method:</b>	A public notice will be placed in the local newspaper to announce the availability of the document, duration of the comment period and how and where to submit comments.
<b>Timing:</b>	The public comment period will follow the establishment of the Administrative Record and Information Repository. The public comment period will last at least 30 and may be extended for another 30 days if requested.
<b>3. Prepare Responsiveness Summary</b>	
<b>Objective:</b>	To summarize comments received during public comment periods, to document how the Agency has considered those comments and to provide responses to major comments.

Method:	The responsiveness summary will be prepared and included in the Administrative Record.
Timing:	The responsiveness summary will be completed at the close of the public comment period.
<b>4. Maintain Open Communication with the Community</b>	
Objective:	To provide two-way communications with community members.
Method:	Regular updates will be provided to the Animas Rivers Stakeholders Group (ARSG)
Timing:	Ongoing
<b>5. Maintain Web Site (<a href="http://www.epaosc.org/site/site_profile.aspx?site_id=8417">http://www.epaosc.org/site/site_profile.aspx?site_id=8417</a>)</b>	
Objective:	To provide the community with current, timely, accurate information about Site activities.
Method:	As new information or documents become available, updates will be made to the Web site.
Timing:	Ongoing
<b>6. Maintain Current Mailing and Email lists</b>	
Objective:	To provide residents, elected officials and other interested parties current information at the Site as it becomes available.
Method:	Contact information on existing lists will be updated regularly.
Timing:	Ongoing
Additional activities as appropriate:	
<ul style="list-style-type: none"> <li>• Fact sheets, reports, technical summaries</li> <li>• Public meetings, Site tours</li> </ul>	

## V. Attachments

Attachment A – List of Contacts and Interested Parties

Attachment B – Locations of Information Repositories and Meeting Locations

Attachment C – Glossary

## Attachment A – List of Contacts and Interested Parties

### EPA

Paula Schmittiel, Remedial Project Manager, 303-312-6861  
Sabrina Forrest, Site Assessment Manager, 303-312-6484  
Steve Way, On-Scene Coordinator, 303-312-6723  
Cynthia Peterson, Community Involvement Coordinator, 303-312-6879  
Dan Wall, Eco Risk Assessor, 303-312-6560  
Susan Griffin, Human Health Toxicologist, 303-312-6651  
Steve Wharton, Superfund Unit Chief, 303-312-6935  
Mike Rudy, Enforcement - Civil Investigator, 303-312-6332  
Richard Sisk, Attorney, 303-312-6638  
Martin Hestmark, Asst. Regional Administrator – EPR, 303-312-6776  
Dan Heffernan, Brownfields & Site Assessment Mgr., 303-312-7074  
David Ostrander, Program Director - Emergency Response, 303-312-6827  
Bill Murray, Program Director - Superfund Remedial Response, 303-312-6401  
Bill Schroeder, Region 8 Lab, 303-312-7755

### Colorado Department of Public Health and Environment (CDPHE)

Doug Jamison, Superfund/Brownfields Unit Leader, 303-692-3404  
Warren Smith, Community Involvement Manager, 303-692-3373

### Colorado Department of Law

Scott Schultz, Assistant Attorney General, 720-508-6256

### Animas River Stakeholders Group (ARSG)

Peter Butler, Coordinator, 970-259-0986  
Steve Fearn, Coordinator, 970-387-5819  
Bill Simon, Coordinator, 970-385-4138

### Bureau of Land Management (BLM)

Brent Lewis, State Office, AML Program Lead, 303-239-3711  
Kay Zillich, AML Program Hydrologist San Juan Public Lands Center, 970-385-1239

### Colorado Division of Reclamation, Mining and Safety (DRMS)

Kirstin Brown, Inactive Mines Program -Durango, 970-903-7889  
Bruce Stover, Inactive Mines Program - Denver, 303-866-3567 x8146

### US Fish and Wildlife Service (USFWS)

Robyn Blackburn, Eco Risk Assessor, 303-312-6663

### Local/Regional Press

Ben Markus, Reporter - Colorado Public Radio, 303-871-9191 x471  
Dale Rodebaugh, Environmental Health Reporter - Durango Herald, 970-375-4564  
Chase Olivarius-Mcallister, Reporter - Durango Herald, 970-375-4544  
Mark Esper, Editor Silverton Standard, 970-387-5477

Katey Fete, Advertising Silverton Standard, 970-387-5477  
Silverton Community Radio, (970) 387-5752

Kinross/Sunnyside Gold

Larry Perino, 208-583-2511, ext.231  
Nathan M. Longenecker, VP & General Council, 303-718-4508

Elected Officials

**Federal**

- Scott Tipton, U.S. Representative –
  - Darlene Marcus, Durango Office, 970-259-1490
  - Scott Streit, Grand Junction Office, 970-241-2499
- Mark Udall, US Senator - Durango field office, 970-247-1047
- Michael Bennett, US Senator – DC office (202) 224-5941

**State**

- Ellen Roberts, Colorado Senate - District 6, 303-866-4884
- Mike McLachlan, Colorado Representative - District 59, 303-866-2914
- Peter McKay, BOCC Commissioner - District 1, 970-387-0189

**San Juan County**

- Scott Fetchenheir, BOCC Commissioner - District 2, 970-387-5671
- Ernie Kuhlman, BOCC Chair - District 3, 970-387-5671
- Peter McKay, BOCC Commissioner - District 1, 970-387-5671
- Willy Tookey, BOCC Administrator, 970-387-5766

**Silverton**

- Chris Tookey, Silverton Mayor,
- Karla Safranski, Silverton Trustee (San Juan Development),
- Malcolm MacDougal, Silverton Trustee,
- Pat Swonger, Silverton Trustee,
- David Zaroni, Silverton Trustee,
- Anthony Edwards, Silverton Trustee, 970-387-5210
- Brian Carlson, Silverton Administrator, 970-387-5522, ex. 14

**La Plata County**

- Gwen Lachelt, 970-382-6219
- Robert (Bobby) Anthony Lieb, Jr., 970-382-6219
- Julie Westendorff, 970-382-6219
- Joe Kerby, County Manager, 970-382-6210

Other Audiences/Interested Groups

Marcie Bidwell, Executive Director, Mountain Studies Institute, 970-426-8863  
Dan Randolph, Executive Director, San Juan Citizen's Alliance  
Bev Rich, San Juan County Historical Society, 970-387-5609

Amy Dickinson, Executive Director, Silverton Area Chamber of Commerce, 970-387-5654  
Ty Churchwell, Trout Unlimited  
Aaron Brill, Owner, Silverton Mountain Ski Area, 970-759-5878  
John Ferguson, Colorado Goldfields, 970-749-2279  
Director: Teresa Brokering, RN, San Juan County Public Health Service, 970-387-0242  
Asst. Director, Lois MacKenzie, San Juan County Public Health Service, 970-387-0242  
Liane Jollo, Director, San Juan Basin Health Department  
Greg Brand, Environmental Health Director, San Juan Basin Health Department, 970-335-2054  
Anthony Eduards, San Juan Development (also Trustee), 970-387-5210  
Ann Oliver, Animas Watershed Partnership (AWP), 970-9903-9361

## Attachment B – Locations of Information Repositories and Meeting Locations

### Location of Information Repositories

EPA Superfund Records Center  
1595 Wynkoop Street  
Denver, Colorado 80202-1129  
303-312-6473 or 1-800-227-8917 x 3126473  
(Records available by appointment only)

Silverton Library  
1111 Reese St  
Silverton, Colorado 81433  
970-387-5770

### Suggested Meeting Locations

Silverton Town Hall  
1360 Greene Street  
Silverton, Colorado 81433  
Contact Town Clerk (970) 387-5522 ext 10  
<http://www.mountainsideconcierge.com/rentals.html>

Kendall Mountain Ski Area  
1 Kendall Pl.,  
Silverton, Colorado 81433  
Contact Town Clerk (970) 387-5522 ext 10  
<http://www.mountainsideconcierge.com/rentals.html>

## Attachment C – Glossary

**Administrative Record (AR):** A file which is maintained and contains all information used by the lead agency to make its decision on the selection of a response action under CERCLA. This file is to be available for public review and a copy is to be established at or near the site, usually at one of the information repositories. Also, a duplicate file is held in a central location, such as a Regional or State office.

**Community Interviews:** Informal face-to-face or telephone interviews held with local residents, government officials, community groups, media representative, potentially responsible parties, and other individuals interested in Site activities. Interviewees are asked to identify the concerns and information needs of the community, and the best techniques for keeping the community informed.

**Community Involvement:** The federal program designed to inform and involve the public and to provide a mechanism for responding to community concerns during the Superfund process.

**Community Involvement Plan (CIP):** A document that identifies community concerns and specifies community relations activities that occur during the remedial response at a Site. The CIP efforts help to keep the public informed of environmental work at the Site, and establishes a program that enables citizens to review and comment on decisions that may affect the final actions at the Site.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):** Commonly referred to as “Superfund,” CERCLA is a Federal law that provides broad Federal authority to respond directly to releases or threatened releases of hazardous substances or pollutant or contaminants that may endanger public health or the environment. The release or threat of release into the environment of any defined hazardous substance could result in CERCLA response or liability. Removal and remedial are the two types of response actions authorized under CERCLA.

**Environment:** Includes water, air, and land and the interrelationship which exists among and between water, air, and land and all living things.

**Fact Sheet:** A brief report summarizing current or proposed activities in the cleanup program at a site.

**Information Repository (IR):** A file containing current information, technical reports, and reference documents regarding a Superfund site. The information repository is usually located in a public building that is convenient for local residents, such as a public school, city hall, or library.

**National Oil and Hazardous Substance Pollution Contingency Plan (NCP):** Regulations adopted by the USEPA to implement the CERCLA program. These regulations are found in 40 CFR Part 300.

**National Priorities List (NPL):** A list of Sites developed by USEPA and designated as needing long-term remedial cleanup. The purpose of the list is to inform the public of the most hazardous waste Sites in the nation. The NPL is also called the Superfund list.

**Open House/Availability Session:** An informal meeting where people can talk to agency officials one-on-one.

**Public Comment Period:** A period of time after the release of a document pertaining to the Site during which the public has the opportunity to read the document and submit comments. Comment periods can range from 30 to 60 days (See responsiveness summary).

**Public Meeting:** A meeting open to the public. At typical public meetings, experts are available to present information and answer questions and citizens are encouraged to ask questions and offer comments.

**Public Notice:** A notice published in major local newspapers, broadcast via local radio stations, and/or sent in individual mailings to announce agency decisions, major project milestones, public meetings, or to solicit public comment on agency actions.

**Public Participation:** A two-way communication process that provides information in a manner comprehensible to the members of the community. The process ensures the public's comments and concerns are taken into account when final decisions are made.

**Release:** Includes any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment

**Remedial Action (RA):** Long-term response action that stops or substantially reduces a release or threat of a release of hazardous substances that is serious but not an immediate threat to public health.

**Removal Action:** Generally, short-term immediate response actions that address releases of hazardous substances that require expedited responses. Removal actions at a contaminated Site may fall into one or three categories: emergency removal actions, time-critical removal actions, or non-time-critical removal actions.

**Response Action:** A CERCLA-authorized action involving either a short-term removal action or a long-term remedial response. This may include but is not limited to removing hazardous materials, containing or treating the waste on-site, and identifying and removing the sources of ground water contamination and halting further migration of contaminants.



**Responsiveness Summary (RS):** The section within the ROD that summarizes comments received from the public during the public comment period, and provides USEPA or other lead agency responses to the comments.

**Risk Assessment:** Qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutants.

**Source:** As applied to hazardous waste, a source is the point of origin of contamination. For example, subsurface source may include underground storage tanks or pipelines. Geographic areas, facilities or portions of a facility where air emissions regulated under the Clean Air Act may be released are also known as source.

**Site:** Any area (landfills, storage facility, etc.) where a hazardous substance is present as result of a release of hazardous material from the facility as defined under CERCLA and as referred to in this and related environmental documents. On-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action.

**Superfund:** the common name used for the trust fund or process established under CERCLA to clean up hazardous waste Sites across the country.

**Superfund Amendments and Reauthorization Act of 1986 (SARA):** A federal law which reauthorized and expanded the jurisdiction of CERCLA.

**Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III:** Part of the SARA mandating public disclosure of chemical information and development of emergency response plans in case of a chemical release.

**United States Environmental Protection Agency (USEPA):** A federal agency that regulates and monitors compliance to environmental laws and regulations.